Module 11-2

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| PatNo → PatAge |
| PatZip9 → PatCity |
| VisitNo → VisitDate  PatNo → PatZip9  ProvNo → ProvSpecialty |
| VisitNo → PatNo |
| VisitNo, ProvNo → Diagnosis  ProvNo → ProvEmail  ProvEmail → ProvNo |

2)

**Step 1: Arrange the remaining FDs into groups by determinant**

PatNo -> PatAge,PatZip9

PatZip9 -> PatCity

VisitNo -> VisitDate,PatNo

ProvNo -> ProvSpeciality,ProvEmail

VisitNo, ProvNo -> Diagnosis

ProvEmail -> ProvNo

**Step 2: For each FD group, make a table with the determinant as the primary key. In the table list, the primary keys are underlined.**

Patient(PatNo,PatAge,PatZip9, FOREIGN KEY (PatZip9) REFERENCES PatZip9)

PatZip9(Patzip9,PatCity)

Visit(VisitNo,VisitDate,PatNo, FOREIGN KEY (PatNo) REFERENCES Patient)

Provision(ProvNO,ProvSpeciality,ProvEmail)

ProvEmail(ProvEmail,ProvNo, FOREIGN KEY (ProvNo) REFERENCES Provision)

Diagnosis(VisitNo,ProvNo,Diagnosis, FOREIGN KEY (VisitNo) REFERENCES Visit, FOREIGN KEY (ProvNo) REFERENCES Provision)

**Step 3: Merge tables with the same columns.**

**Provision and ProvEmail tables are merged and unique constraint is added to ProvEmail**

Patient(PatNo,PatAge,PatZip9, FOREIGN KEY (PatZip9) REFERENCES PatZip9)

PatZip9(Patzip9,PatCity)

Visit(VisitNo,VisitDate,PatNo, FOREIGN KEY (PatNo) REFERENCES Patient)

Provision(ProvNO,ProvSpeciality,ProvEmail, UNIQUE(ProvEmail))

Diagnosis(VisitNo,ProvNo,Diagnosis, FOREIGN KEY (VisitNo) REFERENCES Visit, FOREIGN KEY (ProvNo) REFERENCES Provision)